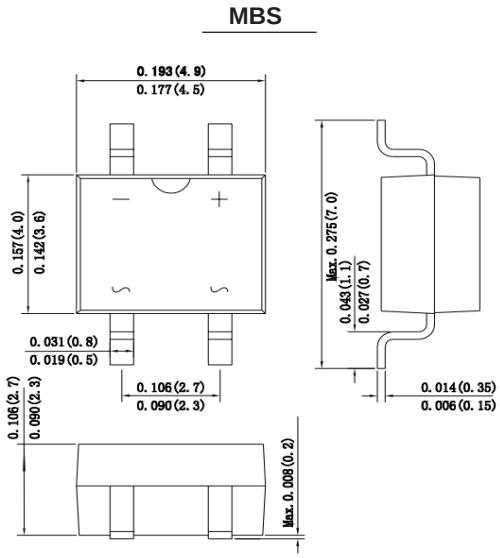
MB1S~MB10S

Single Phase 0.5Amp Glass passivated Bridge Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 250℃/10 seconds at terminals



Dimensions in inches and (millimeters)

Mechanical Data

Case: Molded plastic body
Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
Polarity: Polarity symbol marking on body
Mounting Position: Any
Weight : 0.008 ounce, 0.22 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

	SYMBOLS	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at T_L=30℃ On glass-epoxy P.C.B (Note 1) On aluminum substrate (Note 2)	$I_{(AV)}$	0.5 0.8						Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0						Amps
Maximum instantaneous forward voltage at 0.5A	V_F	1.0						Volts
Maximum DC reverse current T_A =25℃ at rated DC blocking voltage T_A=125℃	I_R	5.0 500						uA
Typical junction capacitance (Note 3)	C_J	15.0						pF
Typical thermal resistance	R_{qJA}	75.0						°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-50 to +155						°C

Note:1.Mounted on glass epoxy PC board with 1.3*1.3mm solder pad
2.Mounted on aluninum substrate PC board with 1.3*1.3mm solder pad
3.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

MB1S THRU MB10S

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

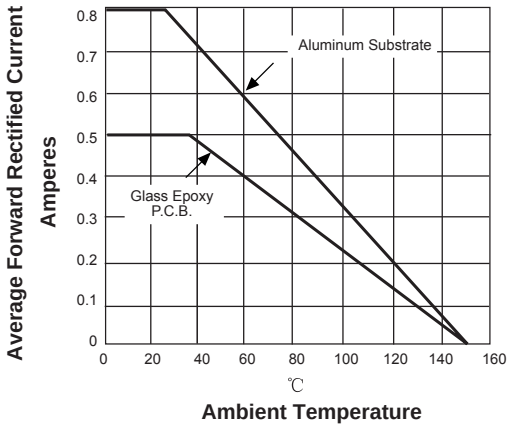


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

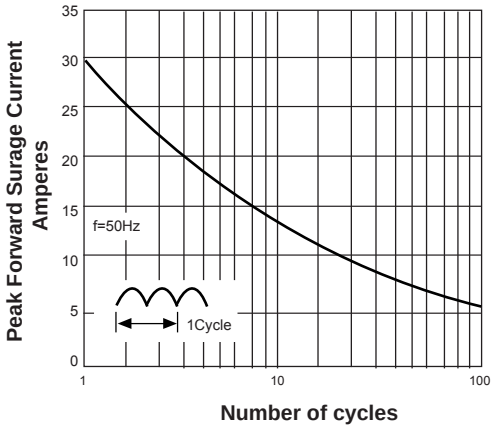


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

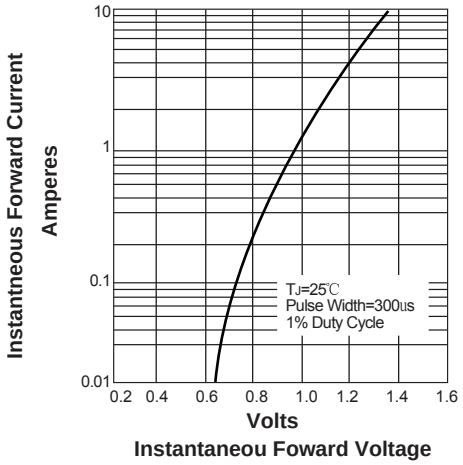


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

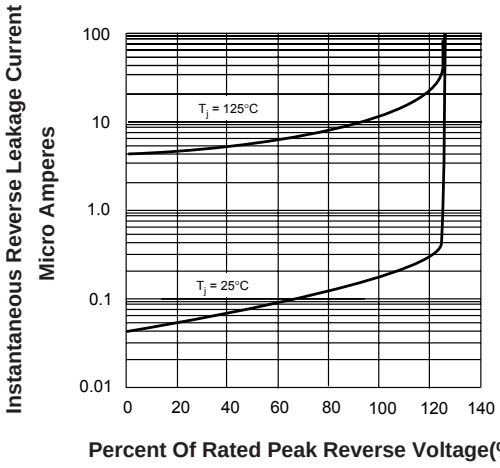


FIG. 5-TYPICAL JUNCTION CAPACTITANE